

Essential connections

Electricity is an essential part of your life. That's why our people work hard to maintain a reliable, yet complex system that delivers electricity to your door the moment you need it.

Here's a simple illustration of how RG&E delivers electricity to your home or business.

Generating System – Consists of power plants that produce electricity. Most New York State generating stations are no longer owned by utilities.

Transmission System – Consists of all the generating plants, step up transformers and high-voltage transmission lines that bring electricity to the distribution system.

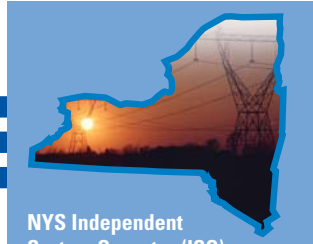
Distribution System – Consists of all lines, poles, and equipment that bring electricity from the substation to your home or business.

Generation

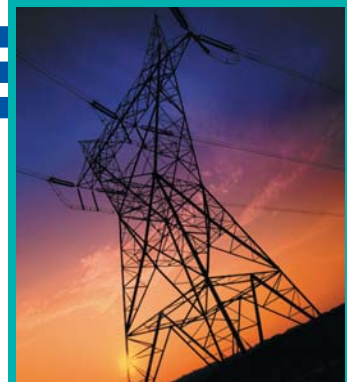


Generating Stations – Various energy sources (water, natural gas, oil, coal, nuclear, or wind) are used to power turbines that generate electricity.

Step Up Transformers – As electricity leaves a generating station, its voltage is increased or stepped up by a transformer to enable it to travel over long distances.



NYS Independent System Operator (ISO) – This independent organization maintains a balance between electricity supply and demand in New York State. It also coordinates supply and demand with similar agencies in neighboring states.



High Voltage Transmission Lines – These lines carry high-voltage electricity over long distances. Voltage is the force that pushes electricity through wires like pressure pushes water through a pipe.

Distribution



Substations – Reduce or step down electricity to usable voltage for use in large businesses and facilities such as schools, and hospitals, etc. Substations also route power via circuits into neighborhoods.



Pole or Pad Mounted Transformers – Before electricity enters homes or small business, the voltage is further stepped down to power appliances, lights, computers, etc.



RG&E
AND
Always at Your Service